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AMATEUR RADIO  
STATION W6OTX

VOL. XVII

100

PARA  
GRAPHS

PALO ALTO AMATEUR RADIO ASSOCIATION, INC.

MINNAPOLIS CIVIL DEFENSE RADIO CLUB, K6YOT

Dec 73

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DECEMBER, 1973 AD

PAARAGRAPHS is the official organ of the Palo Alto Amateur Radio Association, Inc., and the Menlo Park Civil Defense Radio Club.

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\*\*\*\*\*

SUBSCRIPTIONS AND DUES

- 1) Membership dues in PAARA (only) include a subscription to PAARAGRAPHS. (Need I say more???)
- 2) Annual dues are only \$4.00.
- 3) Members will be dropped from our mailing list when their dues expire -- dues are on a calander year basis.
- 4) Subscription to this illustrious journal is \$1.00 a year -- that's less than 9¢ an issue!

Non-subscribers will be dropped from our mailing list as new names are added.

\*\*\*\*\*

SEND ALL CASH, CHECKS, LOOT MONEY AND \$\$\$\$ TO:  
PAARA, P.O. Box 911, Menlo Park 94025

\*\*\*\*\*

ARTICLES GLADLY ACCEPTED -- WRITE ABOUT ANYTHING ! ! !  
(well, Almost Anything.....)

Send to: Rick Ferranti

-OR-

Gary Perazzo

1234 Santa Cruz Ave.

1044 Berkely Ave.

Menlo Park, CA 94025

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415-323-5307

PAARA PICKIN'S -- ANNOUNCEMENTS AND SUCH

OUR NEXT MEETING: Saturday evening, December 15, at 7:30PM  
The Christmas Dinner Party at Sir George's in Redwood  
City. See the center pages of this issue for details

OUR NEXT BOARD OF DIRECTORS MEETING: Will be held Wednesday,  
December 19, at 7:30 PM. in the trailer at SRI. All  
who are interested are invited to attend.

THE PAARA NET: It still meets on 145.24 mhz AM at 8:15 on  
Monday nights.

SILENT KEY: W6OKQ, H.P. "Wes" Westler of Atherton.

NEW MEMBER: W6hxx, Steven Ross of Menlo Park. Steve was a  
member of PAARA in the 1950's. Welcome back...

THINGS TO LOOK FORWARD TO NEXT YEAR: The SET on January 26  
and 27. PAARA beating San Carlos in field day on  
June 22 and 23. PAARAGRAPHS will have a complete  
schedule of events in next issue or the following one.

DID YOU KNOW that PAARA was 26th out of 220 scores nation  
wide in its class for Field Day 1973?

QST QST QST Send information to PAARAGRAPHS so that I don't  
have to sit and scratch my head when I am at a loss  
for space fillers. I'm sure you would rather hear  
some interesting tidbit of gossip about your fellow  
hams in the club rather than a bland non-related  
subject. We also need bodies to help type and  
assemble the paper. Join in and have funnnnnnnnnnn...

HO HO HO MERRY CHRISTMAS AND A HAPPY NEW YEAR

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PAARA BOARD OF DIRECTORS MEETING, NOVEMBER 7, 1973.  
de Hal, W6DEF

Meeting was called to order by Fred Cannam at 1940 local time. Present were Mike Eccles, Paul Thekan, Vance Wardlow, Fred Cannam, Hal Moore, and star reporter for PHARAGRAPHS, Gary Perazzo.

A letter was read from the Menlo Park Recreation Department regarding the Menlo Park Register.

An announcement was read from Doc Gmelin's meeting at the San Jose Red Cross December 1, at 0900. Luncheon will be served and representatives from Clubs and League (ARRL) Officials will be present. Mike Eccles and Hal Moore will represent PAARA.

Treasurer's Report: Bank balance \$487.60 and \$1,000.00 in the savings account. Discussion followed regarding the upgrading of our biggest asset and that is the trailer. Discussion amounted as to just how far to go in the "upgrading". Also, the motor generator should be gotten from Oliver Sweningsen.

Discussion: First annual anniversary of the Foothill Museum. They have invited the Clubs in the area to put on displays of their assets. Discussion as to whether PAARA should put on a demonstration of communications via Amateur Radio.

The SET was discussed being that it is going to be the last weekend of January. The annual Christmas Party jointly held and hosted by San Carlos was discussed.

Secretary,  
Hal Moore, W6DEF

Santa, I want an "s" Line for christmas...please...

### WHY IS JOHN HUBBELL?

By Henry Cady

It is common knowledge among his acquaintances that John Hubbell's career in electricity, electronics and general junk collecting began at quite an early age and this will be an effort to document some of the more notable (and unbelievable) anecdotes and incidents involved in sixty plus years of this endeavor.

John Hubbell came from a family which had many connections and connectors which they manufactured in some quantity and sold thru electrical outlets--in fact, many of the connectors were electrical outlets while others were electrical inlets. While still quite a young man, John worked in this organization and was put in charge of "in-house" memos and later was given responsibility of all the "out-house" memos as well! Some traces of the "out-house" memos can still be seen scrawled on the inside walls of several long-abandoned latrines!

Ever since the first time John stuck his baby fingers into a "live" electric light socket, he's been dabbling in electricity and electronics, and is still thrusting his fingers into electric circuitry of a much more sophisticated and higher voltage nature.

When he was just a tyke of about six, John lived in the boondox where wild currants grew plentifully in nearby wood. He used to gather these by the bushel and peck and bring them home where he assisted his good mama in producing great quantities of currant jams and jellies. Little John was so eager to get the jam and jelly made that, contrary to his mother's wishes, he would never pre-wash the berries but would dump them straight into the pot from the bush. It was this practice which first gave him the title of "Direct Currant Hubbell !" At his mother's request, he later agreed to wash every other currant and thus became known as "A.C. Hubbell."





M E R  
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GUY'S W

GALS W

CHR /

RY ★  
RA CHRISTMAS PARTY!  
GEORGES DEC 15  
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WOOD CITY  
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PER PERSON  
PER YEAR UP TO 10 YEARS  
RIBS - FISH FILLET - CHICKEN  
- DRINKS  
GIFT EXCHANGE  
100 MAX  
WITH GUYS - OM'S  
WITH GALS - YL'S

STMAS

- W6KQZ -

WHY IS JOHN HUBBELL?  
cont.

John had a favorite uncle who was employed as conductor on a milk train which stopped at the little town weekly. One day when the train made a two hour layover waiting for freight, the uncle came to visit John and his mama who were in the throes of making a batch of jelly. Now the uncle was so extremely fond of this substance that he could not wait for it to get completely cooked and kept dipping into the vat of half-cooked jelly which was still rife with pectin and consumed copious quantities of same. This, of course, passed thru his digestive tract with great rapidity causing many frantic trips to the out house when it reached the outlet of said tract. Thus was John's first exposure to currant passing thru a conductor!

In later years, all this experience with the currants almost resulted in John being thrown out of his school's electric shop class when his teacher was trying to explain that the unit of measure for current was the ampere and John jumped up shouting: "Sir! You are wrong! Units of measure for currants are the peck and bushel!"

In the "old days" when John Hubbell's call was simply 6ANR, his style of home brew ham transmitters did not differ greatly from what it is today. Everything, regardless of potential, was pretty much out in the open--as John put it: "So's it can be got at easy!" Well, it could be "got at" easy alright, not only by John himself, but by assorted insects, small rodents, and the family cats, some of which, were reduced to three-leggers from inadvertant contact with the invisible but powerful forces omnipresent in these exposed works! It was especially exciting when a fair-sized bug or a small mouse was resting on the lower plate of the final neutralizing capacitor when the juice was applied. The effect of this condition, was, to say the least, highly sensational! Aside from the obvious instant cremation and vaporization of the "victim", a continuous arc was formed between the plates of the condenser which modulated the new



WHY IS JOHN HUBBELL?  
cont.

free running oscillating final which was producing a broad, hideous sounding, and incredibly powerful signal for a short time 'til some of the connecting buss wire melted.

After one of these incidents, several solitary ham ops and SWL's would be found stone dead beside the charred remains of their receivers. Moral: Don not listen to weak DX signals when ANR is in his shack!

Sometimes, and often unbeknownst to himself, John H. was far ahead of his time as can be seen from the following. When only age 19, John was still living with his family which at that time had small orchards of apples, apricots, and peaches of high quality. Almost the total yield of this growth was made into pies by John's mama and sisters and offered for local sale.

Eventually, the output of the "pie factory" was so great as to saturate the local market, so John was put to the task of creating an expanded market. This he did quickly, criss-crossing the county from border to border establishing outlets in every town and hamlet. This increased the business to such volume and fame that John's mama said, "geez John! We ought to have a name for this operation--what should we call it?" John replied, "OK, We'll call it 'THE PIE NETWORK'". So almost twenty years before the pi network became commonly used in radio transmitters, John Hubbell had one!

John had a flair for improvisation and cut-and-dry practices which occasionally got him into trouble as we shall see. Once, while living in a large northeastern city, John was hauling four sacks of rock salt home to apply to the ice on his driveway, when he came upon a stalled police car blocking a major street. John asked the policeman what the trouble was and was informed that the battery was dead. John then lifted up the floor board of the 1930 Essex hollering, "I can fix it! I can instant charge it by pouring some rock salt in the battery." Within 90 seconds, the battery began to swell up like a balloon and then burst, show-

cont.next page

WHY IS JOHN HUBBELL?  
cont.

ering all onlookers with salt and acid. As John stood before the bench in the night court, the magistrate asked the arresting officer, "What is the charge against this man?" The officer replied, "A salted battery, sir!" When the judge asked John if he'd plea guilty, John said, "Hell no, your honor!" and turning to the officer, asked "When I finished with your battery, was it charged?" The reply, of course, was an emphatic "NO!" "OK" said John, "Since there is no charge, there can be no case!" The confused jurist dismissed the case forthwith with the recommendation that John refrain from any further "assistance" to the police department.

Chapter 2 of WHY IS JOHN HUBBELL? will be included in next month's edition.

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Our thanks to Mr. Cady for these humorous stories.

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SET 1974

The next Simulated Emergency Test will be on January 26 and 27. This year it will have a very special significance. With the presence of the energy crisis, it will be necessary to make the exercise as efficient as possible. In years past, mobiles went rather randomly about to collect messages. This year more effective use of radio will have to play a major role in keeping mobile travel to a minimum. If WX permits, bicycle operations with portable FM rigs might be considered.

Be thinking of ways to make this exercise better than in previous years. Let's use the energy crisis as a means of improving our emergency preparedness.

\*\*\*\*\*

MERRY CHRISTMAS TO ALL FROM PARAGRAPHS

\*\*\*\*\* TECHNICAL TOPICS \*\*\*\*\*

(Reprint from H.P.'s BENCH BRIEFS Vol. 13 Nr. 2  
dB AND dBm WITHOUT LOGS (PART II)  
by Dick Gasperini

Voltage ratios can also be expressed with this method, but it is necessary to double the dB figure for the two key numbers. That is, 6dB is a voltage ratio of 2 to 1 and 20 dB is a voltage ratio of 10 to 1.

For example, what voltage ratio corresponds to a gain of 52 dB? This can be expressed as 20 dB + 20 dB + 6 dB + 6 dB, which corresponds to a voltage ratio of  $10 \times 10 \times 2 \times 2$  which equals 400.

How many dB correspond to a voltage ratio of 8 to 1? This breaks down to  $2 \times 2 \times 2$ , which is 6 dB + 6 dB + 6 dB which equals 18 dB.

All of the above apply to dB, which is a relative measurement. This technique also works for measurements stated in dBm, which is an absolute power level, by remembering that the reference for dBm is 1 mw. Multiply the power ratio by 1 mw to obtain the absolute power level. For example, +7 dBm is a power ratio of 5 (obtained by  $10 \times \frac{1}{2}$ ) multiplied by 1 mw, for an absolute power level of 5 mw. The number of dBm can be determined by reversing the procedure. For example, to determine the dBm equivalent of an absolute power of 2 microwatts, first divide by 1 mw. This yields a power ratio of  $2 \times 10^{-3}$ , which can also be expressed as  $2 \times 1/10 \times 1/10 \times 1/10$ .

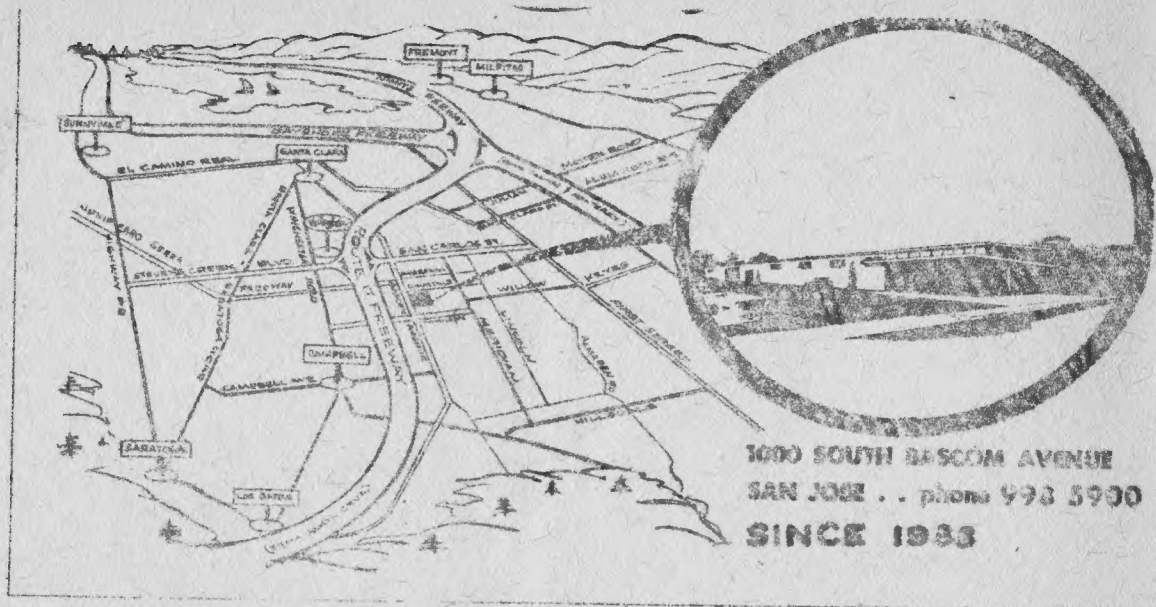
The equivalent is +3 dB - 10 dB - 10 dB - 10 dB = -27 dBm since the initial measurement was in absolute power.

Using this technique, a very wide range of dB and dBm can be covered by remembering only a few key figures.

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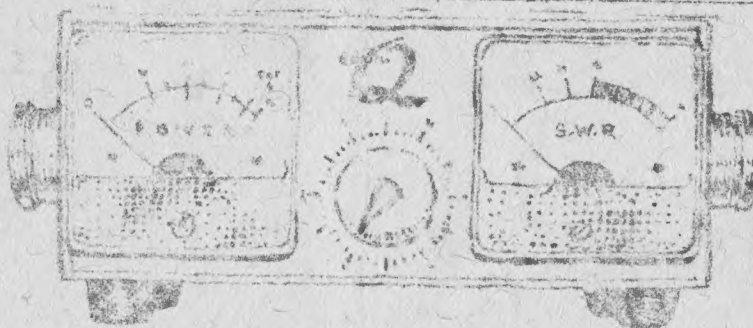
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